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JAMES M SMITH
HAMILTON BROOK SMITH & REYNOLDS
TWO MILITIA DRIVE
LEXINGTON MA 02173

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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/707,622

Applicant(s)
Clifford Heath et al

Examiner
Matthew Smithers

Group Art Unit
2764



☒ Responsive to communication(s) filed on Nov 24, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three (3) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-96 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-96 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

STATUS OF APPLICATION

Claims 1, 4, 5, 29, 60, 61, and 65 were amended in amendment A filed November 24, 1998.

Claims 66-96 were added in amendment A.

Claims 1-96 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1-96 have been considered but are moot in view of the new ground(s) of rejection.

The indicated allowability of claims 6, 10-20, 22-30, 36, 41-51, 53-59 and 63-64 are withdrawn in view of the new rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-11, 15-22, 30-33, 37-42, 46-53, 59, 60, 61, 72, 73, 77 and are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al.

Regarding claim 1, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 2, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches the use of memory that is frequently accessed by the client computer in which components of the updated application program are stored (see column 3, lines 58-62).

Regarding claim 3, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches downloading from the server to the client the components not present on the client (see column 4, lines 5-11).

Regarding claim 7, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches a method for storing components of an application program into directory locations which the client can access and download the components into the respective memories for proper execution of the application program (see column 3, lines 32-39).

Regarding claim 8, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches a launcher that communicates with a server to

cause the server to download, update an application program and execute the updated application program (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 9, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 8), in addition Kullick teaches a launcher that is a functional part of the operating system running on the client (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 10, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches executing supplemental programs prior to executing the updated application program (see column 7, lines 18-41).

Regarding claim 11, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 10), in addition Kullick teaches executing supplemental programs following the execution of the updated application program (see column 7, lines 25-28).

Regarding claim 15, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches removing components that are no longer needed on a client system prior to executing the updated program (see column 7, lines 25-28).

Regarding claim 16, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches updating an application at a specified time interval (see column 4, lines 5-19).

Regarding claim 17, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 16), in addition Kullick teaches a user customizing performance parameters on a client (see column 7, lines 43-58).

Regarding claim 18, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches updating an application program regardless of whether a call to the server has been made by the client (see column 5, lines 49-54).

Regarding claim 19, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 18), in addition Kullick teaches updating an application program only as needed to maintain the application program current without executing the application (see column 5, lines 49-67 to column 6, lines 1-17).

Regarding claim 20, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches automatically updating an application program on the client each time the client is booted up (see column 7, lines 18-28).

Regarding claim 21, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches tracking and reporting the program updates (see column 6, lines 50-67 to column 7, lines 1-14).

Regarding claim 22, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), in addition Kullick teaches modifications to an application program include modifying instructions (executable codes), modifying features (data and library files) and modifying the operating system and/or hardware (parameter files) (see column 1, lines 20-27).

Claim 31 is the system claim that corresponds to method claim 1. Therefore claim 31 is rejected by a similar rationale.

Claims 32, 33, 37, 38, 39, 41, 42, 46, 47, 48, 49, 50, 51, 52, 53 and 59 are system claims that correspond to method claims 2, 3, 7, 8, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 22 and 30 respectively. Therefore claims 32, 33, 37, 38, 39, 41, 42, 46, 47, 48, 49, 50, 51, 52, 53 and 59 are rejected by similar rationale.

Regarding claim 60, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for

automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 61, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for

automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 72, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, executes supplemental programs prior to executing the updated application program (see column 7, lines 18-41) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made

to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 73, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 72), in addition Kullick teaches executing supplemental programs following the execution of the updated application program (see column 7, lines 25-28).

Regarding claim 77, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, removing components that are no longer needed on a client system prior to executing the updated program (see column 7, lines 25-28) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to

specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 78, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, updating an application at a specified time interval (see column 4, lines 5-19) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8,

lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 79, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 78), in addition Kullick teaches a user customizing performance parameters on a client (see column 7, lines 43-58).

Regarding claim 80, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program,

compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, updating an application program regardless of whether a call to the server has been made by the client (see column 5, lines 49-54) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 81, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 80), in addition Kullick teaches updating an application program only as needed to maintain the application program current without executing the application (see column 5, lines 49-67 to column 6, lines 1-17).

Regarding claim 82, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, automatically updating an application program on the client each time the client is booted up (see column 7, lines 18-28) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 83, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, updates modifications to an application program include modifying instructions (executable codes), modifying features (data and library files), modifying the operating system and/or hardware (parameter files) (see column 1, lines 20-27) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18).

However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of significantly minimizing system administration overhead

through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Claims 4-6, 34-36, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al and U.S. patent 5,752,042 granted to Cole et al.

Regarding claim 4, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), however Kullick and Brichta fail to specifically teach using the hypertext transport protocol (HTTP) to download the catalog and components for updating the application program. Cole teaches the use of HTTP in communicating between a client and a server (see column 2, lines 47-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of using a protocol that quickly accesses a resource on a server or remote system by locating its unique address.

Regarding claim 5, Kullick et al and Brichta discloses everything claimed, as applied above (see Claim 1), however Kullick and Brichta fail to specifically teach using the file transfer protocol (FTP) to download the catalog and components for updating the application program. Cole teaches the use of FTP in communicating between a client and a server (see column 2, lines 49-

50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of using a protocol that quickly accesses a resource on a server or remote system by locating its unique address and copying the necessary files from the remote system to the client system.

Regarding claim 6, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), however Kullick and Brichta fail to specifically teach accessing other servers via network addresses. Cole teaches accessing servers for code updates (see column 2, lines 51-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of using a protocol that quickly accesses a resource on a server or remote system by locating its unique address and retrieving the necessary updates.

Claims 34-36 are system claims that correspond to method claims 4-6 respectively. Therefore claims 34-36 are rejected by similar rationale.

Regarding claim 71, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3,

lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However Kullick and Brichta fail to specifically teach accessing other servers via network addresses. Cole teaches accessing servers for code updates (see column 2, lines 51-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of using a protocol that quickly accesses a resource on a server or remote system by locating its unique address and retrieving the necessary updates and significantly minimizing system administration overhead through the use of a catalog facility. The

combination enables a system administrator to quickly and easily add new versions of an application program to a database within the catalog facility.

Claims 12, 43 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al and U.S. patent 5,440,723 granted to Arnold et al.

Regarding claim 12, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 10), however Kullick and Brichta fail to specifically teach using a virus scanning program. Arnold teaches using a virus scanning program within a computer network to detect any anomalous system behavior within a computer or computer network (see column 4, lines 60-68 to column 5, lines 1-26 and column 10, lines 13-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Arnold's method for detecting viruses in a network and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of preventing the application programs and operating system from becoming corrupted during the update process.

Claim 43 is a system claim that correspond to method claim 12. Therefore claim 43 is rejected by a similar rationale.

Regarding claim 74, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 72), however Kullick and Brichta fail to specifically teach using a virus scanning

program. Arnold teaches using a virus scanning program within a computer network to detect any anomalous system behavior within a computer or computer network (see column 4, lines 60-68 to column 5, lines 1-26 and column 10, lines 13-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Arnold's method for detecting viruses in a network and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of preventing the application programs and operating system from becoming corrupted during the update process.

Claims 13, 44 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al and U.S. patent 5,724,345 granted to Guarneri et al.

Regarding claim 13, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), however Kullick and Brichta fail to specifically teach using a wait-time interval to limit any delay associated with the updating process. Guarneri teaches using a wait-time interval to limit any delay associated with the updating process in a client-server application (see column 9, lines 48-67 to column 10, lines 1-4 and column 12, lines 26-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Guarneri's method for transmission of electronic software and Brichta's system and

method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing reliable transmission between the client and server.

Claim 44 is a system claim that correspond to method claim 13. Therefore claim 44 is rejected by a similar rationale.

Regarding claim 75, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However Kullick and Brichta fail to specifically teach using a wait-time interval to limit any delay associated with the updating process. Guarneri teaches using a wait-time interval to limit any delay associated with the updating process in a client-server application (see column 9, lines 48-67 to column 10, lines

1-4 and column 12, lines 26-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Guarneri's method for transmission of electronic software and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing reliable transmission between the client and server.

Claims 14, 45 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al and U.S. patent 5,343,527 granted to Moore.

Regarding claim 14, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 1), however Kullick and Brichta fail to specifically teach using a cryptographic digest for each software component in the update process. Moore teaches a method for encrypting and protecting reusable software components and accessing the components via a network (see column 2, lines 27-64 and column 17, lines 28-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Moore's method for encrypting software components and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing uncorrupted software components to a client system from a server.

Claim 45 is a system claim that correspond to method claim 14. Therefore claim 45 is rejected by a similar rationale.

Regarding claim 76, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However Kullick and Brichta fail to specifically teach using a cryptographic digest for each software component in the update process. Moore teaches a method for encrypting and protecting reusable software components and accessing the components via a network (see column 2, lines 27-64 and column 17, lines 28-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Moore's method for encrypting software components and Brichta's system and method for a catalog upgrade system with Kullick's method

for automatically updating software programs for the purpose of providing uncorrupted software components to a client system from a server.

Claims 23, 24, 27, 28, 30, 40, 54-57, 84, 85, 88, 89 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al and U.S. patent 5,754,830 granted to Butts et al.

Regarding claim 23, Kullick et al, Brichta et al and Cole discloses everything claimed, as applied above (see Claims 1 and 4), however Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using the Internet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing real-time updates to a client system (see **Butts et al: column 2, lines 36-49**).

Regarding claim 24, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 23), in addition Kullick teaches launching an application program to

update and execute the program after the program has been updated (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 27, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 23), in addition Kullick teaches using an icon on the client to execute the application program (see column 4, lines 59-67 to column 5, lines 1-8).

Regarding claim 28, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 23), in addition Kullick teaches searching, via a network, all critical files needed to launch an application program (see column 4, lines 37-58).

Regarding claim 30, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 23), in addition Kullick teaches deleting unnecessary components (see column 6, lines 43-49).

Regarding claim 40, Kullick et al and Brichta et al discloses everything claimed, as applied above (see Claim 23), in addition Kullick teaches a launcher on the client (see column 3, lines 65-67 to column 4, lines 1-5).

Claims 54-57 are system claims that correspond to method claims 23, 24, 27 and 28 respectively. Therefore claims 54-57 are rejected by similar rationale.

Regarding claim 83, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the

application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions, updates modifications to an application program include modifying instructions (executable codes), modifying features (data and library files), modifying the operating system and/or hardware (parameter files) (see column 1, lines 20-27) and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18).

However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). however Kullick and Brichta fail to specifically teach using the hypertext transport protocol (HTTP) to download the catalog and components for updating the application program. Cole teaches the use of HTTP in communicating between a client and a server (see column 2, lines 47-49). However Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using the Internet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application

program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing real-time updates to a client system (see Butts et al: column 2, lines 36-49).

Regarding claim 85, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 84), in addition Kullick teaches launching an application program to update and execute the program after the program has been updated (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 88, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 85), in addition Kullick teaches using an icon on the client to execute the application program (see column 4, lines 59-67 to column 5, lines 1-8).

Regarding claim 89, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 85), in addition Kullick teaches searching, via a network, all critical files needed to launch an application program (see column 4, lines 37-58).

Regarding claim 96, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the

client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However Kullick and Brichta fail to specifically teach using the hypertext transport protocol (HTTP) to download the catalog and components for updating the application program. Cole teaches the use of HTTP in communicating between a client and a server (see column 2, lines 47-49). However Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using the Internet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing real-time updates to a client system, using a protocol that quickly accesses a resource on a server or remote system by locating its unique address and significantly minimizing system administration overhead through the use of a catalog

facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Claims 25 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al, U.S. patent 5,754,830 granted to Butts et al and U.S. patent 5,794,259 granted to Kikinis.

Regarding claim 25, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 24), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. Kikinis teaches using a plug-in module with the web browser (see column 3, lines 45-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kikinis's method of enhancing web browsing over the Internet, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of enhancing the speed of a web browser that is used in downloading data over the Internet (**see Kikinis: column 2, lines 44-48**).

Regarding claim 86, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 85), however Kullick, Brichta, Cole and Butts fail to

specifically teach a browser cooperatively running with a plug-in module. Kikinis teaches using a plug-in module with the web browser (see column 3, lines 45-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kikinis's method of enhancing web browsing over the Internet, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of enhancing the speed of a web browser that is used in downloading data over the Internet (**see Kikinis: column 2, lines 44-48**).

Claims 26, 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al and U.S. patent 5,754,830 granted to Butts et al and U.S. patent 5,737,533 granted to De Hond.

Regarding claim 26, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 24), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. De Hond teaches launching a helper application with the browser (see column 6, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of de Hond's system for browsing a database, Butts's server and web browser for

persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of allowing a client system to access file types that a browser could not normally handle (**see de Hond: column 3, lines 28-44**).

Regarding claim 62, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However, Kullick and Brichta fail to specifically teach using the hypertext transport protocol (HTTP) to download the catalog and components for updating the application program. Cole teaches the use of HTTP in

communicating between a client and a server (see column 2, lines 47-49). However Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using the Internet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). However Kullick, Brichta, Cole and Butts fail to specifically teach installing a launcher on the client system. De Hond teaches installing a launcher via the Internet (see column 5, lines 65-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of de Hond's system for browsing a database, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of quickly and easily add new versions of an application program to the database within the catalog facility, quickly accessing a resource on a server or remote system by locating its unique address and providing real-time updates to a client system.

Regarding claim 63, Kullick et al, Brichta et al, Cole et al, Butts et al and De Hond disclose everything claimed, as applied above (see Claim 62), in addition de Hond teaches creating a link on the web and installing a helper application on the client (see column 6, lines 1-29).

Regarding claim 87, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 85), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. De Hond teaches

launching a helper application with the browser (see column 6, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of de Hond's system for browsing a database, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of allowing a client system to access file types that a browser could not normally handle (**see de Hond: column 3, lines 28-44**).

Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al, U.S. patent 5,754,830 granted to Butts et al, U.S. patent 5,737,533 granted to De Hond and U.S. patent 5,794,259 granted to Kikinis.

Regarding claim 64, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 62), however Kullick, Brichta, Cole, Butts and de Hond fail to specifically teach a browser cooperatively running with a plug-in module. Kikinis teaches using a plug-in module with the web browser (see column 3, lines 45-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kikinis's method of enhancing web browsing over the Internet, de Hond's system for browsing a database, Butts's server and web browser for persistent connection to a host system, Cole's

method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of enhancing the speed of a web browser that is used in downloading data over the Internet (see **Kikinis: column 2, lines 44-48**).

Claims 29, 58, 66, 69, 90, 91 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al and U.S. patent 5,754,830 granted to Butts et al.

Regarding claim 29, Kullick et al, Brichta et al and Cole discloses everything claimed, as applied above (see Claims 1 and 4), however Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using an Intranet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing real-time updates to a client system (see **Butts et al: column 2, lines 36-49**).

Claim 58 is a system claim that correspond to method claim 29. Therefore claim 58 is rejected by a similar rationale.

Regarding claim 66, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 29), in addition Kullick teaches launching an application program to update and execute the program after the program has been updated (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 69, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 29), in addition Kullick teaches using an icon on the client to execute the application program (see column 4, lines 59-67 to column 5, lines 1-8).

Regarding claim 90, Kullick discloses a method and apparatus for automatically updating software programs on a client system through a network connected to a server (see column 3, lines 25-43). The server computer maintains upgrade versions of the application programs used on the various client systems (see column 3, lines 63-65). The client computer maintains the application program (see column 3, lines 44-46), identifies application programs for update, causes the server to download a copy of the most recent version of an application program, compares the most recent version of the application program with the present version on the client, updates the application program components based on the comparison of the two versions and executes the updated application programs (see column 3, lines 58-67 to column 4, lines 1-20 and column 8, lines 11-18). However, Kullick fails to specifically disclose using a catalog of

components with the version identifications. Brichta teaches the use of a catalog database upgrade system which is capable of adding and modifying items in the database (see column 1, lines 67 to column 2, lines 1-5 and column 2, lines 49-67 to column 3, lines 1-27). However Kullick and Brichta fail to specifically teach using the hypertext transport protocol (HTTP) to download the catalog and components for updating the application program. Cole teaches the use of HTTP in communicating between a client and a server (see column 2, lines 47-49). However Kullick, Brichta and Cole fail to specifically teach using a browser to make the call to the server via a hypertext link using an Intranet. Butts teaches executing a web browser on the client to enable interaction between the server and the client (see column 3, lines 41-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of providing real-time updates to a client system, using a protocol that quickly accesses a resource on a server or remote system by locating its unique address and significantly minimizing system administration overhead through the use of a catalog facility. The combination enables a system administrator to quickly and easily add new versions of an application program to the database within the catalog facility.

Regarding claim 91, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 90), in addition Kullick teaches launching an application program to

update and execute the program after the program has been updated (see column 3, lines 65-67 to column 4, lines 1-58).

Regarding claim 94, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 91), in addition Kullick teaches using an icon on the client to execute the application program (see column 4, lines 59-67 to column 5, lines 1-8).

Regarding claim 95, Kullick et al, Brichta et al and Cole et al discloses everything claimed, as applied above (see Claim 91), in addition Kullick teaches searching, via a network, all critical files needed to launch an application program (see column 4, lines 37-58).

Claims 67 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al, U.S. patent 5,754,830 granted to Butts et al and U.S. patent 5,794,259 granted to Kikinis.

Regarding claim 67, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 66), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. Kikinis teaches using a plug-in module with the web browser (see column 3, lines 45-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kikinis's method of enhancing web browsing over the Internet, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program

running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of enhancing the speed of a web browser that is used in downloading data over the Internet (**see Kikinis: column 2, lines 44-48**).

Regarding claim 92, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 91), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. Kikinis teaches using a plug-in module with the web browser (see column 3, lines 45-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kikinis's method of enhancing web browsing over the Internet, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of enhancing the speed of a web browser that is used in downloading data over the Internet (**see Kikinis: column 2, lines 44-48**).

Claims 68 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,732,275 granted to Kullick et al and further in view of U.S. patent 5,848,421 granted to Brichta et al, U.S. patent 5,752,042 granted to Cole et al, U.S. patent 5,754,830 granted to Butts et al and U.S. patent 5,794,259 granted to Kikinis.

Regarding claim 68, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 66), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. De Hond teaches launching a helper application with the browser (see column 6, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of de Hond's system for browsing a database, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of allowing a client system to access file types that a browser could not normally handle (**see de Hond: column 3, lines 28-44**).

Regarding claim 93, Kullick et al, Brichta et al, Cole and Butts discloses everything claimed, as applied above (see Claim 91), however Kullick, Brichta, Cole and Butts fail to specifically teach a browser cooperatively running with a plug-in module. De Hond teaches launching a helper application with the browser (see column 6, lines 1-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of de Hond's system for browsing a database, Butts's server and web browser for persistent connection to a host system, Cole's method of updating an application program running on a client computer and Brichta's system and method for a catalog upgrade system with Kullick's method for automatically updating software programs for the purpose of allowing a

client system to access file types that a browser could not normally handle (see **de Hond: column 3, lines 28-44**).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Smithers, whose telephone number is (703) 308-9293. The examiner can normally be reached on M-TH from 7:30 a.m. to 6:00 p.m. EST.

If attempts to reach the examiner by phone fail, the examiner's supervisor, James Trammell, can be reached at (703) 305-9768. Additionally, the fax phone for Art Unit 2764 is (703) 308-5357.

Matthew Smithers
February 5, 1999



James P. Trammell
Supervisory Patent Examiner
Technology Center 2700